

Sept. 8, 2004

FY05 Budget Request for Muon Targetry Program

Our budget request for FY05 is driven by the possibility of running our anticipated Muon Collider/Neutrino Factory targetry concept experiment at CERN in Spring 2006. This target date is still operative although we have been informed that a delay startup of CERN PS is still a possibility. Our proposal to CERN has been accepted on the basis of scientific merit (The INTC committee at CERN recommends approval) and we are now negotiating with CERN management regarding safety issues and the financing structure of the experiment. We hope to have these issues resolved by the December meeting of the CERN research board.

Highlights of our budget plan include:

- 1) A power supply purchase recommended by CERN power engineers which we feel is a cost effective solution to the 4.5 MVA requirement for our pulsed solenoid to attain 15T.
- 2) A program to design, engineer, and fabricate the 20 m/s Hg Jet system which will be an insert into our pulsed solenoid. This work will feature significant input and coordination from ORNL who have substantial experience and laboratory resources for the handling of mercury systems.

Our priority list for supplemental funding from DOE:

- 1) Power Supply purchase \$340 K
- 2) Hg Jet Optics components and fabrication \$65 K

		BNL	ORNL	Princeton
Magnet Systems				
	Solenoid Testing	140	140	
	Cryoengineering	40	40	
	PS purchase	340	340	
	Battery R&D	40	40	
Hg Jet				
	Systems integration	123	123	
	Nozzle development	30		30
	Optics components	25	25	
	Fabrication	40	40	
Proj. Management		53	53	
Material R&D		50	30	20
Simulations		50	50	
		931	758	123
				50